

# Evaluation of Perceived Architectural Quality - Case of Culture House of the City of Khenchela, Algeria

Abdeldjalil Hamdaoui<sup>1\*</sup>, Mohamed Cherif Adad<sup>2</sup>, Ismahane Haridi<sup>3</sup>, Ahmed Mounir Ansar<sup>4</sup>

<sup>1,3,4</sup>PhD student, Laboratory for the Evaluation of the Quality of Use in Architecture and the Built Environment (LEQUAREB), Department of Architecture, Larbi Ben M'hidi University of Oum El-Bouaghi, 04000 Algeria.

<sup>2</sup>Professor, Department of Architecture, Larbi Ben M'hidi University of Oum El-Bouaghi, 04000 Algeria.

Received: September 11, 2022

Accepted: September 28, 2022

Published: October 03, 2022

## Abstract

The paper discusses the perceived architectural quality as a concept of multiple dimensions and its indications in architecture and how it deals in a profound way with perception and the means in which it stimulates the user and drives him to judge if the quality of an architectural phenomenon fulfills the designated requirements and answers its occupants' needs. In this light, it was essential to assess the perceived architectural quality of the culture house ALI-SOUAIIHI located in the city of Khenchela in the north east of Algeria and to analyze the different attitudes and tendencies of each strata to form a general conception of the perceived quality of the building. The study encompasses a five-point Likert scale questionnaire and uses a quantitative research method to assess the perceived architectural quality of the culture house, the questionnaire was administered to 200 randomly selected individuals. The results show that respondents had moderate mean scores for the building evaluation in regard to its perceived architectural quality and that three of the four socio-demographic variables studied, affected the perceived quality assessment. It can be concluded that respondents' opinions and attitudes need to be considered and investigated prudently to improve the perceived architectural quality of the culture house.

**Key words:** Perceived architectural quality, evaluation, perception, culture house, city of Khenchela.

## INTRODUCTION

Perceived quality is an intangible parameter that is evaluated in relation to a variety of preferences and tendencies, according to Aaker (1991) this notion articulates around several distinct dimensions like features, conformance, reliability, serviceability, fit and finish. The relationship between the building and its appearance is emphasized in architecture, however, to apprehend what the building represents, it is essential to think of it beyond its external image (Leatherbarrow, 2005). Thus, the perceived architectural quality relates to all senses and as a concept it needs to be divided to a set of comprehensive dimensions. Perceived architectural quality can be portrayed as the overall evaluation of the benefit acquired by an individual on the basis of perception, recognition and experience. The increasing or decreasing value provided by the architectural building different characteristics such as its design and presentation, its function and significance, have the ability to influence the users' satisfaction. Therefore, users have different perspectives and evaluations of the perceived quality of various buildings and consequently the evaluation of the same building can differ from a user to another leading to various perceived value estimations, for it is a subjective matter. This variance may apply to the assessment of the perceived quality of the Khenchela culture house due to the fact that each aspect of this building has different characteristics that can be interpreted differently according to the opinion of each user. As a result, the quality perceived by visitors can be assessed from various standpoints in terms of aesthetic presentation, reliability, comfort and the overall impression of the construction quality. The perceived architectural quality is the factor that directly influences the intention to revisit the building or not, and it reflects different perceived values, such as the perceived social value, the perceived emotional value and the perceived functional value.

Accordingly, studying the user's perception and its ability to organize sensations into useful information, forming a process that allows detecting and interpreting the environment, facilitates the procedure of apprehending the perceived quality as a notion, and equally contributes to defining the relationship between the perception and the architectural building. In this context, the Gestalt school that was created in 1912 by a group of German psychologists, took interest in studying the perceptual phenomena in relation to patterns and visuals (Ware, 2012), and shed light on how

image, form, memory, experience can affect the human perception and it fits quite well in architecture as form is one of its major aspects aside from function and durability. Hence this approach paved its way to other multidisciplinary fields, setting a solid ground to how perception and visualization can be approached.

The main objective of this research is to assess the overall perceived architectural quality of the culture house of the city of Khenchela and to analyze the influence of socio-demographic variables on respondents' estimations of perceived quality in order to improve the building itself and increase its usability and expand that to future projects.

### **Aesthetic Perception**

A study by Blijlevens et al. (2011), demonstrates a correlation between typicality and aesthetic perception where an atypical design tends to be more aesthetically pleasing on condition that it does not deviate too much from typicality (Cowen-Elstner, 2018).

Also according to Veryzer & Hutchinson (1998), distorted designs that differ largely from the standard tend to make a less positive impact on aesthetic perception. Thus, this study aims to analyze how the users interpret the concept of aesthetic perception as a distinct construct. Aesthetic designs are more impactful at raising positive attitudes than unaesthetic designs (Kurosu & Kashimura, 1995), producing feelings of attachment, loyalty (revisit intention), and assuring enduring usability, stimulating the positive sensory mechanism of the recipient unlike unaesthetic designs that reduce the cognitive performance. In architecture, this concept means that a building with an aesthetically pleasing design can affect the perceiver and generate a positive feedback clouding function and accessibility related issues, for example, in the other hand unaesthetic design can equally diminish the functional and social value. Thus, aesthetic designs are observed to be friendlier to the user, and help gaining acceptance among people over time, making them more lenient towards design shortcomings, Also a good design promotes creative thinking, modernity, originality and most importantly confidence (Lidwell et al, 2018).

### **Socio-Demographic Factors**

In an experiment by Bruner & Goodman (1947), two groups of children from different social classes were to estimate the size of the coins presented to them, the results showed that children with poor backgrounds tend to overestimate the size of the coins while children with wealthy backgrounds are less to do so, which indicates that the social background aspect influenced the visual perception of children (Grütter, 2020). Furthermore, it is not the social background alone that can affect the visual perception and the estimation of perceived quality of the building but it extends to other variables like gender, age, profession, residency, education (Coburn et al, 2017).

### **Spatial Perception of the Building**

External imagery affects directly mental imagery, so if the external image of the building perceived by the user is simple, coherent, with a unique design and thought behind it, it will form a strong mental image (Kirby, 1990) while imagery with complex and various patterns is by extension hard to be memorized in mind. Shaping up mental images is done through certain successive perceptual acts, the particularity of this process to each person, leads to perceiving images from different points of view and interpreting them in various ways (Macarthur, 2002) as stated also by Golledge (1991), that the variations in human sensory modalities and the information extracted from external sources lead to shaping a unique mental model (Ware, 2012). Unconscious influence can also affect perceived architectural quality of the building and therefore, the evaluation provided by the user, the past experiences and memorized images attached to certain ideas and emotions rooted in the unconsciousness, can create a behavioral response either positive or negative towards the perceived edifice, a thing to be taken in consideration when assessing perceived quality (Cowen-Elstner, 2018). First impressions may produce a "Feeling-Based Evaluation" during the assessment of the target either by perceiving it or by visualizing it mentally as described in a research by Pham et al. (2001). Past memories can affect impression leading it to extend over a long period (Asch, 1946). Certain architectural traits can trigger an initial response that can lead to the generation of an early assessment of the object without thoroughly experiencing it. If the user had a good first impression of the building, from its appearance for example, this can consequently lead to positive feedback on other aspects of this building and vice versa.

According to the process of "formation of super-signs" presented by Schuster & Beisl (1978), the initial stage of this process, if applied on an architectural building as an example, requires summarizing its similar signs into a super-sign giving a high priority to essential elements, that means that the observer from the first glance, only takes note of the

general shape of the building with reduced quantity of information (Grütter, 2020), but each time the observer repeats this process, he can identify additional elements according to their essentiality until he develops a clearer mental image of the perceived building, so buildings with complex shapes and intricate design elements provide multilayered information and entails more effort and time to be fully perceived.

## MATERIALS AND METHODS

The research was conducted with a quantitative approach using a questionnaire distributed through simple random sampling and stratified sampling to evaluate the perceived architectural quality of the culture house of the city of Khenchela and to assess the categorical groups' attitudes. The research draws on Ladwein's model (2001), AHP Based Model (Saaty, 1990) of assessment of architectural design quality introduced by Harputlugil et al (2009) in order to decompose perceived architectural quality into a more simplified hierarchy.

A combined framework of constructs (dimensions) forming perceived architectural quality was established to study the human-building relationship. The questionnaire is developed based on concepts scrutinized in literature review and around those concepts the questions were formed and selected prudently and measured by a five-point Likert scale. The sample is normally distributed as indicated by a p-value of 0.20 and 0.448 ( $p > 0.05$ ) in Kolmogorov-Smirnov and Shapiro-Wilk test, respectively. All items are analyzed through Cronbach's alpha internal consistency test demonstrating a significant alpha value of 0.946.

### Sampling Procedure

The questionnaire was distributed to 200 respondents of various age groups, residencies and education levels (Table 1). The study aims to analyze the different points of view and the tendencies of each strata to form a general image of the perceived quality of the culture house building. 10 samples were distributed to verify the integrity of the questionnaire and to ensure that the halo effect does not influence the respondents' choices who may overvalue some criteria leading to a bias in the interpretation of the outcomes. An interview with the building occupants helped shaping up some questions, making them free from confusion or ambiguity.

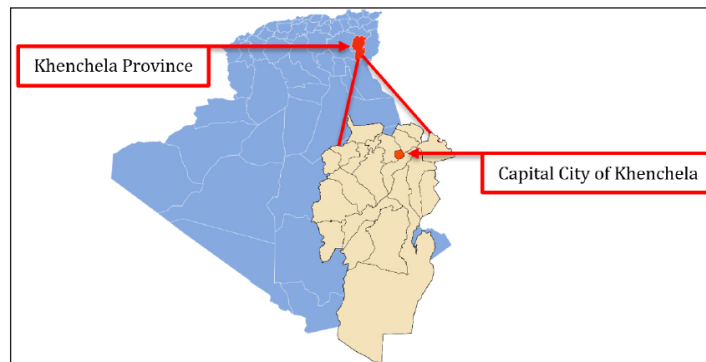
**Table 1.** Socio-demographic profile of the sample

Socio-demographic variable	Item	Frequency	Percentage (%)
<b>Gender</b>	Male	141	70.5
	Female	59	29.5
<b>Age</b>	< 20	9	4.5
	20-30	72	36.0
	30-40	66	33.0
	40-50	36	18.0
	> 50	17	8.5
<b>Residency</b>	Near the building	91	45.5
	Far from the building	78	39.0
	Outside the city	31	15.5
<b>Education</b>	< High School Degree	80	40.0
	High School Degree	18	9.0
	Bachelor's Degree	28	14.0
	Master's Degree	56	28.0
	PhD Degree	18	9.0
<b>Total</b>		200	100.0

### Case Study

The study investigates the perceived architectural quality of the culture house (ALI-SOUAIHI) of the city of Khenchela in the north east of Algeria (Figure 1), the building is located in the heart of the city, a zone of dense activities, and it holds a special cultural and functional value as it is the sole building of a significant cultural character in the city and considered

to be a landmark by its citizens. The culture house was inaugurated on February 17, 2003 and through the years, it has undergone renovation work to improve its image, An enclosure wall was built around it separating it from its entourage, in addition to repainting work applied to its exterior (Figure 2). Culture houses generally reflect the city’s cultural and social values through their architectural designs and their functional congruence, an aspect that needs to be thoroughly studied to verify its reliability in this case.



**Figure 1.** The geographical location of the culture house of the city of Khenchela. Source: Kerbush, 2012 and Mouh2jjel, 2020; treated by author, 2022



**Figure 2.** Views of the culture house of the city of Khenchela. Source: author, 2022

**Data Analysis**

IBM SPSS version 22.0 was used to analyze the data and to perform statistical tests determining the significant difference between categorical groups.

Respondent’s ratings of each item forming a construct, were averaged to form a User’s Construct Mean. All constructs had a good reliability, ranging from 0.733 to 0.849 (Table 2). The respondents’ perceived quality means were calculated by averaging their constructs means.

Concept mapping (Jonassen et al, 1993) was integrated in the research methodology as a tool to render concepts more comprehensible and to discern relationships between them which can lead to a new understanding of their meanings and connotations.

**Table 2.** Constructs reliability test

Construct	Item	Reported Reliability (Cronbach’s Alpha)
Aesthetic Perception	Q01	0.820
	Q02	
	Q03	
	Q04	
Perceived Comfort	Q05	0.849
	Q06	
	Q07	
	Q08	
	Q09	
	Q10	

Construction Quality	Q11	0.805
	Q12	
	Q13	
	Q14	
	Q15	
Spatial Perception	Q16	0.792
	Q17	
	Q18	
	Q19	
	Q20	
	Q21	
	Q22	
	Q23	
	Q24	
	Q25	
Perceived Reliability	Q27	0.733
	Q28	
	Q29	

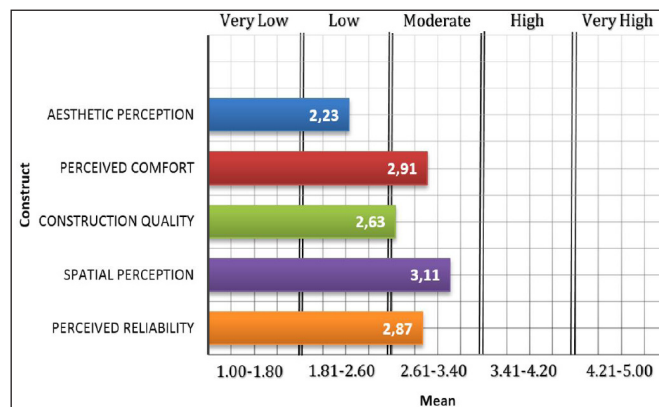
**RESULTS AND DISCUSSION**

**General Evaluation of Perceived Architectural Quality**

The perceived architectural quality had a mean score of 2.748 and a S.Dof 0.720 (Table 3). All constructs forming the perceived architectural quality had mean scores ranging from 2.23 to 3.11. Aesthetic perception had a low mean score of 2.23 while perceived comfort, construction quality, spatial perception and perceived reliability had moderate mean scores of 2.91, 2.63, 3.11 and 2.87, respectively (Figure 3). In light of this result, it can be concluded that respondents had moderate ratings towards the culture house building.

**Table 3.** Perceived architectural quality descriptive statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Perceived Architectural Quality	200	1	4.71	2.748	0.720



**Figure 3.** Means of constructs composing perceived architectural quality. Source: author, 2022

**Socio-demographic influence on respondents' evaluations of perceived architectural quality**

**Gender**

Most respondents were males representing 70.5% of the total number of respondents, with a mean of 2.649 and S.Dof 0.709 while females (29.5%) had a mean of 2.982 and S.D of 0.695 indicating that females had a more positive attitude towards the building compared to males.

Independent 2-tailed t-test (Table 4) revealed that there was a statistically significant difference between males and females ( $t = -3.043, p = 0.003$ ).

**Table 4.** Independent 2-tailed t-test for equality of means for Male vs. Female

	Group Statistics			t-test for Equality of Means		
	Gender	Mean	S.D	t	df	Sig. (2-tailed)
Perceived Architectural Quality	Male	2.649	0.709	-3.043	198	0.003**
	Female	2.982	0.695			

\* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

**Age**

Respondents age groups were as following: most respondents were in the age group of (20-30) (36%) followed by the age group of (30-40) (33%), the age group of (40-50) (18%), respondents that exceeded 50 (8.5%) and those less than age 20 (4.5%). The means were lower and adjacent among younger respondents (<20, 20-30 and 30-40) and relatively higher among older respondents (40-50 and >50). ANOVA test (Table 5) was performed to compare the influence of respondents' age on perceived architectural quality mean. The test revealed that there was a statistically significant difference between at least two groups ( $F(4, 195) = 4.103, p = 0.003$ ).

**Table 5.** A one-way ANOVA test for Age groups

Socio-demographic variable	Item	Descriptives		ANOVA			
		Mean	S.D	df		F	Sig
Age	< 20	2.748	.936	4	195	4.103	0.003**
	20-30	2.723	.683				
	30-40	2.532	.729				
	40-50	3.010	.635				
	> 50	3.125	.623				

\* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ . Note: BG = Between Groups, WG = Within Groups

Tukey-Kramertest for multiple comparisons (Table 6) demonstrates that the mean value of perceived architectural quality was significantly different between respondents in the age group of (30-40) and respondents in the age group of (40-50) ( $p = 0.01$ ) and also respondents that surpassed age 50 ( $p = 0.018$ ).

**Table 6.** Tukey-Kramerpost-hoc test for Age groups

(I) Age	(J) Age	Mean Difference (I-J)	Std. Error	Sig.
< 20	20-30	0.024	0.246	1
	30-40	0.216	0.248	0.907
	40-50	-0.261	0.260	0.853
	> 50	-0.376	0.287	0.686
20-30	< 20	-0.024	0.246	1
	30-40	0.191	0.119	0.495
	40-50	-0.286	0.142	0.265
	> 50	-0.401	0.188	0.211
30-40	< 20	-0.216	0.248	0.907
	20-30	-0.191	0.119	0.495
	40-50	-0.477	0.144	0.01*
	> 50	-.592	0.189	0.018
40-50	< 20	0.261	0.260	0.853
	20-30	0.286	0.142	0.265
	30-40	0.477	0.144	0.01*
	> 50	-0.115	0.205	0.981
> 50	< 20	0.376	0.287	0.686
	20-30	0.401	0.188	0.211
	30-40	0.592	0.189	0.018*
	40-50	0.115	0.205	0.981

\* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

**Residency**

The residency profile of respondents shows that 45.5% of respondents live near the building, 39% live far from it while 15.5% live outside the city.

Respondents that live near the building had a mean of 2.612 and S.D of 0.647, while respondents that live far from the building had a mean of 2.813 and S.D of 0.763, On the other hand those who live outside the city had a higher mean of 2.978 and S.D of 0.748. One-way Anova test (Table 7) revealed that there was a significant difference between at least two groups ( $F(2, 197) = 3.606, p = 0.029$ ).

**Table 7.** A one-way ANOVA test for Residency groups

Socio-demographic variable	Item	Descriptives		ANOVA			
		Mean	S.D	df	F	Sig	
Residency	Near the building	2.612	.647	BG	WG	3.606	.029*
	Far from the building	2.813	.763	2	197		
	Outside the city	2.978	.748				

\* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ . Note: BG = Between Groups, WG = Within Groups

Multiple comparisons test (Table 8) exhibits that the mean value of perceived architectural quality was significantly different between respondents who live near the building and respondents who live outside the city ( $p = 0.038$ ). There was no significant difference in perceived architectural quality mean between respondents who live near the building and those who live far from the building ( $p = 0.163$ ) or respondents who live far from the building and those who live outside the city ( $p = 0.520$ ).

**Table 8.** Tukey-Kramer post-hoc test for Residency groups

(I) Residency	(J) Residency	Mean Difference (I-J)	Std. Error	Sig.
Near the building	Far from the building	-.200	.109	.163
	Outside the city	-.365	.147	.038*
Far from the building	Near the building	.200	.109	.163
	Outside the city	-.164	.150	.520
Outside the city	Near the building	.365	.147	.038*
	Far from the building	.164	.150	.520

\* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

**Level of Education**

The level of education of respondents ranged from less than High School Degree to PhD degree, the perceived architectural quality means were close to each other with no significant difference between respondents with various levels of education ( $F(4, 195) = 0.193, p = 0.942$ ) (Table 9). Accordingly, the level of education of respondents did not have a significant influence on their attitude towards the culture house building.

**Table 9.** A one-way ANOVA test for Education groups

Socio-demographic variable	Item	Descriptives		ANOVA			
		Mean	S.D	df	F	Sig	
Education	< High School Degree	2.748	.801	BG	WG	.193	.942
	High School Degree	2.669	.684	4	195		
	Bachelor's Degree	2.802	.670				
	Master's Degree	2.714	.640				
	PhD Degree	2.839	.739				

\* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ . Note: BG = Between Groups, WG = Within Groups

**Summary of Results**

It can be argued that the notion of perceived quality is a compound notion of multi-dimensional factors and to evaluate this concept, it is necessary to pass by the process of assessing each of its constituting elements following the most suitable method of analysis in view of the fact that flexibility and versatility are required to approach such subjective issue (Rönn, 2014). Most respondents consider the culture house building to have a moderate perceived architectural quality, and that was demonstrated by the moderate mean scores regarding perceived comfort, construction quality, spatial perception and perceived reliability. Whereas aesthetic perception had a lower mean score.

Socio-demographic variables like gender, age, and residency were found to have significant influence on respondents’ choices regarding the assessment of the building perceived quality, while the level of education was found to have no significant influence on the perceived quality evaluation. It can be concluded that 3 of 4 socio-demographic variables had a significant influence on the respondents’ attitudes and by extension on their assessment of the perceived quality of the culture house building (Table 10).

**Table 10.** Socio-Demographic variables influence on perceived architectural quality

<i>Socio-demographic variable</i>	<i>P-Value</i>	<i>Influence on perceived architectural quality</i>
Gender	0.003**	Supported
Age	0.003**	Supported
Residency	0.029*	Supported
Education	0.942	Not Supported

\* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

**CONCLUSION**

The research shows that perceived architectural quality is an amalgamated entity susceptible to the influence of various factors like gender, age and residency. Perception is an essential element in the process of identifying and evaluating this concept. Users perceive buildings differently according to their socio-demographic profiles, personal preferences, social backgrounds and therefore, improving the perceived quality is heavily related to studying users’ perception and its implications in architecture.

Architects must pay great attention to the perceived value of buildings whether it was design, functional or social related value and realize that a large part of the design process must revolve around the user in the first place.

In order to improve the perceived architectural quality, user’s involvement is a key factor in providing helpful feedback and consequently contributing to the project success. Users can effectively contribute to refining the building quality in many aspects by highlighting the project points of strength, identifying its weaknesses and proposing adequate solutions that can be implanted after being thoroughly analyzed by professionals.

**REFERENCES**

1. Aaker, D. A. (1991). *Managing brand equity : capitalizing on the value of a brand name*. Free Press ; Toronto.
2. Asch, S. E. (1946). Forming impressions of personality. *The Journal of Abnormal and Social Psychology*, 41(3), 258–290. <https://doi.org/10.1037/h0055756>
3. Blijlevens, J., Carbon, C.-C., Mugge, R., & Schoormans, J. P. (2011). Aesthetic appraisal of product designs: Independent effects of typicality and arousal. *British Journal of Psychology*, 103(1), 44–57. <https://doi.org/10.1111/j.2044-8295.2011.02038.x>
4. Bruner, J. S., & Goodman, C. C. (1947). Value and need as organizing factors in perception. *The Journal of Abnormal and Social Psychology*, 42(1), 33–44. <https://doi.org/10.1037/h0058484>
5. Coburn, A., Vartanian, O., & Chatterjee, A. (2017). Buildings, beauty, and the brain: A neuroscience of architectural experience. *Journal of Cognitive Neuroscience*, 29(9), 1521–1531. [https://doi.org/10.1162/jocn\\_a\\_01146](https://doi.org/10.1162/jocn_a_01146)
6. Cowen-Elstner, C. (2018). *Impacting the Sensory Experience of Products : Experimental Studies on Perceived Quality*. Springer Fachmedien Wiesbaden : Imprint : Springer Gabler.



7. Golledge, R.G. (1991). Cognition of Physical and Built Environments. In: Gärling, T. and Evans, G.W., Eds., Environment, Cognition, and Action: An Integrated Approach, Oxford University Press, New York, 35-62.
8. Grütter, J. K. (2020). *Basics of Perception in Architecture* (1st ed. 2020 ed.). Springer Vieweg.
9. Harputlugil T, Gültekin A. T, Topcu Y. İ. (2009, October 09). Architectural Design Quality The Practitioners Perspective An AHP based Approach for Assessment International Conference on Chancing Roles: New Roles, New Challenges, Noordwijk aan Zee, Netherlands, 259-268
10. Jonassen, D. H., Beissner, K., & Yacci, M. (1993). *Structural knowledge: Techniques for representing, conveying, and acquiring structural knowledge* (1st ed.). Erlbaum.
11. Kerbush, R. (2012). Dz-40 Khenchela. <https://commons.wikimedia.org>. Retrieved September 1, 2022, from [https://commons.wikimedia.org/wiki/File:DZ-40\\_Khenchela.svg](https://commons.wikimedia.org/wiki/File:DZ-40_Khenchela.svg).
12. Kirby, K., & Kosslyn, S. (1990). Thinking visually. *Mind & Language*, 5(4), 324-341. <https://doi.org/10.1111/j.1468-0017.1990.tb00167.x>
13. Kurosu, M., & Kashimura, K. (1995, May 7-11). Apparent usability vs. inherent usability: experimental analysis on the determinants of the apparent usability. Denver, Colorado. Conference companion on Human factors in computing systems. 292-293.
14. Ladwein, R. (may 2001). L'impact de la conception des sites de e-commerce sur le confort d'utilisation : une proposition de modèle. Congrès International de l'Association Française du Marketing, vol 17, Deauville, France.
15. Leatherbarrow, D., & Mostafavi, M. (2005). *Surface architecture*. MIT Press.
16. Lidwell, W., Butler, J., & Holden, K. (2003). *Universal principles of design: A cross disciplinary reference*. Rockport Publishers.
17. Macarthur, J. (2002). The image as an architectural material. *South Atlantic Quarterly*, 101(3), 673-693. <https://doi.org/10.1215/00382876-101-3-673>
18. Mouh2jjjel. (2020). Dz-40 (2019). <https://commons.wikimedia.org>. Retrieved September 1, 2022, from [https://commons.wikimedia.org/wiki/File:DZ-40\\_\(2019\).svg](https://commons.wikimedia.org/wiki/File:DZ-40_(2019).svg).
19. Pham, M. T., Cohen, J. B., Pracejus, J. W., & Hughes, G. D. (2001). Affect monitoring and the primacy of feelings in judgment. *Journal of Consumer Research*, 28(2), 167-188. <https://doi.org/10.1086/322896>
20. Rönn, M. (2014). *Quality in Architecture - A Disputed Concept*. ARCC Spring Research Conference. Detroit, Michigan, USA.
21. Saaty, T. L. (1990). How to make a decision: The Analytic Hierarchy Process. *European Journal of Operational Research*, 48(1), 9-26. [https://doi.org/10.1016/0377-2217\(90\)90057-i](https://doi.org/10.1016/0377-2217(90)90057-i)
22. Schuster, M., & Beisl, H. (1978). *Kunst-Psychologie: Wodurch Kunstwerke Wirken*. DuMont Buchverlag.
23. Veryzer, Jr., R. W., & Hutchinson, J. W. (1998). The influence of unity and prototypicality on aesthetic responses to new product designs. *Journal of Consumer Research*, 24(4), 374-385. <https://doi.org/10.1086/209516>
24. Ware, C. (2012). *Information visualization perception for design* (3rd ed.). Elsevier/MK.

**Citation:** Abdeldjalil Hamdaoui, Mohamed Cherif Adad, et al. *Evaluation of Perceived Architectural Quality - Case of Culture House of the City of Khenchela, Algeria*. *Int J Innov Stud Sociol Humanities*. 2022;7(9): 138-146. DOI: <https://doi.org/10.20431/2456-4931.0709014>.

**Copyright:** © 2022 The Author(s). This open access article is distributed under a Creative Commons Attribution (CC-BY) 4.0 license